

## Brain PET/CT or PET/MR Scan with FDG (Fluorodeoxyglucose)

Dear patient,

We welcome you to your appointment in our service, taking place in the near future.

Please bring your insurance document or a copy of your insurance certificate with you

### What is a PET/CT or PET/MR?

PET (Positron Emission Tomography), CT (Computed Tomography) and MR (Magnetic Resonance Imaging) all produce cross-sectional images of your body. In PET/CT and PET/MR, two of the examinations are combined within one scanner.

**PET:** a small dose of radioactive tracer (here F-18 FDG) - given to the patient - sends rays from within the body. The PET scanner localizes the tracers' whereabouts and represents it in cross-sectional images of the patient.

**CT:** X-rays travel through the patient and are weakened. The weakening is a measure of the densities of various body tissues. The reconstructed cross-sectional CT-images depict these densities throughout the patient.

**MR:** the patient - placed in the scanner - is exposed to one strong and weak variable additional magnetic fields. Radio waves are sent into the patient, interact with body tissues and produce other radio waves. As they characterize tissues of the patient, the waves are recorded and reconstructed into cross-sectional images.

### Preparation for a Brain PET/CT or PET/MR

- Stop intake of fluids and food for at least 4 hours (unsweetened mineral water ok, NO chewing gum, NO candies)
- Take medications as prescribed
- In case of existing/possible pregnancy or if you breast-feed, please contact staff.

### Attention Diabetics

**Oral antidiabetic** medications may take them as prescribed, observing rules above

### Patients on long/short acting Insulin

The evening prior to the examination you should inject the prescribed long acting Insulin dose. In the morning of the examination take a small breakfast 4 hours prior to the exam and inject only short acting Insulin. **Insulin pump:** leave it on "night setting" (base dose of Insulin) without additional injection during the 4 pre-exam hours.

At the beginning of the exam we will check blood glucose levels once more.

If you have experienced claustrophobia in the past, please let our medical technicians know. If you have any questions prior to the examination, contact us at +41 (0) 44 255 1818 (option 3).

Please bring a 2 CHF coin with you to securely place your belongings in one of our safety lockers.

It is important, that you arrive on time for the examination. Tracers are ready-made and will decay, if not used on time.

### FDG-PET/CT or PET/MR examination proper

In the PET-Center, our technicians await you.

Total examination time is 1.5 hours. After measuring your blood sugar, you will receive an injection of radioactive tracer (FDG in this case, see above). FDG has no side effects. You are then placed in a darkened room for 50 minutes, so that the tracer distributes throughout your body.

Finally, you are placed on the examination table of PET/CT or PET/MR, and a low dose CT or a short MR scan will be performed. Depending on the requested information, an additional exam is conducted with CT or MR contrast media, which is injected into your arm. If you have a known allergy, particularly to **Iodine**, let us know and do not come with your own car. This will allow us to pre-medicate you against side effects.

### After the FDG-PET/CT or PET/MR exam

**You should not be accompanied by children or adolescents to the exam.**

### Reporting

Evaluating your PET/CT or PET/MR exam takes time. Thus, no results can be given right after the exam. A report will be sent to your physician usually by the end of the examination day.

### Please note

If you need to cancel or delay your appointment, contact us the latest one working day prior to the exam. Else, we need to charge you for costs generated. Contact: +41 44 255 1818 (option 3).

